

**Notice of Allowability**

Application No.

09/679,494

Examiner

Cheukfan Lee

Applicant(s)

PILU ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed June 6, 2005.
2. ☒ The allowed claim(s) is/are 1, 2 and 7-25, now renumbered 1-21, respectively.
3. ☒ The drawings filed on 11 January 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.



1. All pending claims 1, 2 and 7-25 are allowed. Claims 1, 7, 17, 20, and 25 are independent.
2. In the previous Office Action dated April 7, 2005, in section 4, the rejection of claims 20-24, the examiner inadvertently type 679,494 (which is the serial number of the present application) in the place for the U.S. patent number 6,507,415 of the Toyoda et al. reference. Toyoda et al. (U.S. Patent No. 6,507,415) was applied in that rejection of the previous Action.
3. The following is an examiner's statement of reasons for allowance:

Claims 1, 2, 7-19, and 25 were allowed in the previous Office Action dated April 7, 2005. Reasons for allowance given in the previous Office Action are still valid after the updated search and are repeated below.

Independent claim 20 has been amended to include limitations of claim 26, now canceled, which were indicated allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. The reason for allowance given in the previous Office Action is still valid and is repeated below.

Claim 1 requires matching the first data and the second data by randomly selecting a plurality of identifiable features in the first image data and searching the second image data for a corresponding plurality of identifiable features and calculating a transform for matching the first data with the second data based on pairs of identifiable

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features in the first data and corresponding identifiable features in the second data.

This "randomly selecting" limitation in combination with other limitations of claim 1 is not taught by the closest prior art Toyoda et al. (U.S. Patent No. 6,507,415).

Claim 2 depends on claim 1 and is allowable of reason given for claim 1.

Claim 7 and its dependent claims 8-16 are allowable over the prior art of record because the closest prior art Toyoda et al. (U.S. Patent No. 6,507,415) does not disclose applying a transform to match second and third image data to produce a transform image data and combining the transform image data with first combined image data, which is produced by combining the first image data and the second image data, to produce a combined image data representing the original image of the large original. Although Toyoda et al. states that the number of scans of a large original is determined by the size of the original and the maximum size readable by the scanner and thus is changed as needed for originals of different sizes (col. 11, lines 60-65), Toyoda et al. does not disclose applying a transform to produce a transform image data and combining the transform image data with already combined image data as claimed in claim 7.

Claim 17 and its dependent claims 18 and 19 are allowable over the closet prior art Toyoda et al. (U.S. Patent No. 6,507,415). Toyoda et al. discloses that the number of scans of the large original is not limited to two scans; the number of scans of an original is determined by the size of the original and the maximum size readable by the

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scanner (1) (col. 12, lines 60-65). However, Toyoda et al. does not teach that, when positioning the document in a third orientation, the second shortest edge of the document lies adjacent the second longest edge of the image capture area, such that a third portion of the document or original corresponding to a second end of the document overlaps the image capture area. That is because, even in the case the large original is long that it needs three scans instead of two scans, in positioning the third portion of the original document, Toyoda et al. rotates the document such that the second shortest edge of the document is adjacent the first longest edge of the image capture area, not the second longest edge of the image capture area as required by claim 17.

Claim 20 as amended requires that the feature detector randomly detect a plurality of features of the image data before combining the image data from different scans. This feature in combination with other limitations of claim 20 is not taught by the closest prior art Toyoda et al. (U.S. Patent No. 6,507,415).

Claims 21-24 depend on claim 20 and are allowable for the reason given for claim 20.

Claim 25 requires that the feature detector randomly detect a plurality of features of the image data in combination with the user interface, image processor, matcher, and data combiner. This combination is not taught by the closest prior art Toyoda et al. (U.S. Patent No. 6,507,415).

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheukfan Lee  
June 13, 2005

A handwritten signature in black ink, appearing to read "Cheukfan Lee", is located in the bottom right corner of the page.